Cancel claim 2.

3. (Amended) The heat transfer apparatus according to claim 1 wherein the heat conveying member is formed from a plurality of heat sinks interconnected to one another so as to surround at least a portion of the receptacle.

4. (Amended) The heat transfer apparatus according to claim 3 wherein the two passages extend through at least a portion of each of the heat sinks, and wherein the heat transfer apparatus further comprises a plurality of connectors each extending between adjoining heat sinks and having a first end connecting one of the two internal passages of one of the adjoining heat sinks with one of the two internal passages in the other of the adjoining heat sinks for permitting fluid to pass through the internal passages from one heat sink to the other.

A3

5. (Amended) The heat transfer apparatus according to claim 3 wherein the plurality of heat sinks interconnect so as to define a substantially square housing for the receptacle and wherein the two internal passages extend through at least a portion of the heat sinks.

6. (Amended) The heat transfer apparatus according to claim 1 wherein the heat transfer apparatus further comprises at least one heat exchanging element disposed in heat transfer relation to the receptacle to transfer heat to and from the receptacle, the heat conveying member being in heat transfer relation to the heat exchanging element for transferring heat to or from the heat exchanging element.

7. (Amended) The heat transfer apparatus according to claim 6 wherein the heat exchanging element comprises a thermoelectric module, the module adapted to receive electric current for controlling transfer of heat through the module from a first side of the module to an opposite second side of the module.

A4

9. (Amended) A cold cranking simulator comprising:

a receptacle for receiving a sample;

at least one heat exchanging element disposed in heat transfer relation to the receptacle, the

heat exchanging element adapted to receive electric current for transferring heat to or from the receptacle by means of the heat exchanging element; and

a heat conveying member in heat transfer relation to the heat exchanging element for transferring heat to or from the heat exchanging element, the heat conveying member having at least two internal passages spaced apart from one another through at least a portion of the heat conveying member, the internal passages having first and second ends,

an inlet,

an outlet,

a passage splitter connected to the inlet and the first ends of the two internal passages for dividing flow through the inlet into the two passages, and

a passage union connected to the outlet and the second ends of the two passages.

the passages formed so as to provide for counter-flowing circulation of a fluid.

Cancel claim 10.

11. (Amended) The cold cranking simulator according to claim 9 wherein the heat conveying member is formed from a plurality of heat sinks interconnected to one another so as to surround at least a portion of the receptacle.

12. (Amended) The cold cranking simulator according to claim 11 wherein the two passages extend through at least a portion of each of the heat sinks, and wherein the heat transfer apparatus further comprises a plurality of connectors each extending between adjoining heat sinks and having a first end connecting one of the two internal passages of one of the adjoining heat sinks [and an]with one of the two internal passages in the other of the adjoining heat sinks for permitting fluid to pass through the internal passages from one heat sink to the other.

Cancel claim 13.

14. (Amended) The cold cranking simulator according to claim 9 further comprising a temperature control system having a temperature probe for generating a signal representing a temperature monitored by the probe, the control system being in electrical communication with the

heat exchanging element and adapted to receive the signal for controlling the current for the heat exchanging element in response to the signal generated by the probe.

New Claims:

19. (New) A heat transfer apparatus for use in controlling the temperature of a sample container, the heat transfer apparatus comprising a heat transfer housing having a wall and a bottom, the wall having an inside surface defining a cavity within the housing, the wall including at least one electrical heat transfer device for controlling heat transfer from the inside surface of the wall, the wall having an inlet port, an outlet port and an internal cooling circuit that extends from the inlet port to the outlet port, the cooling circuit including first and second channels connected to the inlet port and the outlet port, the first channel extending from the inlet port in a first direction through the wall and the second channel extending to the outlet port through the wall in a substantially opposite direction from the first channel such that in operation the flow though the first and second channels are in opposite directions.

20. (New) A heat transfer apparatus according to claim 19 wherein the wall is made up of multiple sections, each wall section adapted to removably engage with two adjacent wall sections.

21. (New) A heat transfer apparatus according to claim 19 wherein the inlet and outlet ports are formed in one wall section and wherein the first and second channels extend through the other three wall sections.

22. (New) A heat transfer apparatus for use in controlling the temperature of a sample container, the heat transfer apparatus comprising

a heat transfer housing having four wall sections and a bottom, the wall sections having an inside surface defining a cavity within the housing and an outside surface;

at least two thermal electrical units mounted in two of the wall sections in heat transfer relationship with the inside surface for controlling heat transfer from the inside surface of the wall;

an inlet port formed extending from the outside surface of one wall section into the wall;

an outlet port formed extending from the outside surface of one wall section into the wall;